

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/626,157	07/24/2003	Jose Angel de la Rosa	100200997-1	9699	
22879	7590 03/16/2005		EXAM	EXAMINER	
	PACKARD COMPAN	· -	JAWORSKI,	FRANCIS J	
P O BOX 27	[,] 2400, 3404 E. HARMON	Y ROAD			
	TUAL PROPERTY ADM		ART UNIT	PAPER NUMBER	
FORT COLI	LINS, CO 80527-2400		3737		

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			SN		
	Application No.	Applicant(s)			
	10/626,157	DE LA ROSA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jaworski Francis J.	3737			
The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence address	-		
Period for Reply	VIC SET TO EVOIDE 2 MONT	H(S) EDOM			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) o will apply and will expire SIX (6) MONTHS from the application to become ABANDO	timely filed days will be considered timely, om the mailing date of this communica NED (35 U.S.C. § 133).	tion.		
Status					
1) Responsive to communication(s) filed on 24 Ju	uly 2003.				
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.		0		
3) Since this application is in condition for allowa	•		is		
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-26 is/are pending in the application					
4a) Of the above claim(s) is/are withdra	wn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-26</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>24 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct	,	•	` '		
11)☐ The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	ce Action or form P1O-152.	•		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicative documents have been received in Rule 17.2(a)).	ation No ived in this National Stage			
Attachment(s)	" –	(DTO 446)			
1) Motice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summa Paper No(s)/Mail	Date			
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>07242003</u> .	5) Notice of Informa 6) Other:	al Patent Application (PTO-152)			

Application/Control Number: 10/626,157 Page 2

Art Unit: 3737

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 9, 13 – 14, 16, 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (US4222274) which teaches an apparatus and method for an external ultrasound transducer ring for sensing acoustic reflectivity parameters which is movable by means of rotational and elevational motors 46, 66 respectively in order to derive a 3D image set of an object by combination of individual ultrasound image scans under control of computer processor 188..

Claims 3, 7 and 10-12 and 24 – 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Seo (US6685644) which teaches method and structure for an external ultrasound imaging device 11, internal ultrasound imaging device 26 and a processor 18 which combines image portions as shown in Fig. 5 to create a composite 3D image display of the object including manipulable presentations as in fig. 10

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Application/Control Number: 10/626,157

Art Unit: 3737

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seo in view of Johnson or Dick et al (US4233988). Since Seo uses conventional external ultrasound imaging, it would have been obvious in view of Johnson to externally image with a ring imager or in view of Dick et al to image with an imaging ring in order to compile an external 3D image of an object.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seo in view of Martin et al (US6275722). Whereas Seo does not mention MRI devices, it would have been obvious in view of Martin et al to reconstruct a composite 3D image using an internal MRI coil since this would allow the external imager to positionally reference the images.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seo as applied to claim 3 above, and further in view of Desai (US5433198)...

Whereas the former merely suggests in col. 1 that X-ray fluoroscopy may be used to track a probe tip, it would have been obvious in view of the latter to employ internal x-ray visualization in order to localize a probe tip such as in Seo where ultrasound is performing the main internal scan.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson as applied to claim 13 above, and further in view of Martin et al for reasons analogous to that set forth above.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Martin et al as applied to claim 15 above, and further in view of Seo.

Art Unit: 3737

Whereas the former are silent as to overlay of images, it would have been obvious in view of the latter to blend-overlay internal and external images in order to obtain the adaptive benefits of both modes

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

FJJ:fjj

03142005.

Primary Examiner